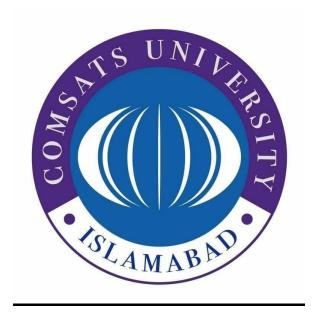
ARTIFICIAL INTELLIGENCE

(CSC 462)

LAB # 13



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SUBMITTED TO: SIR WAQAS ALI

DATE SUBMITTED: 11-12-2023

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Lab Task:

Create a knowledge base which defines your family tree and make a query that uses application of modus ponens to derive a fact which is not explicitly elaborated in the knowledge base.

Code:

```
pro1.pl
parent(ali, abdullah).
parent(sara, aimen).
parent(ali, amna).
parent (sara, abdullah).
married(X, Y):- parent(X, Z), parent(Y, Z), X = Y.
siblings(X, Y):- parent(C, X) ,parent(C, Y), X\=Y.
                                    Compiler:
 SWI-Prolog (Multi-threaded, version 8.0.2)
                                                                               File Edit Settings Run Debug Help
 Welcome to SWI-Prolog (threaded, 32 bits, version 8.0.2)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
 Please run ?- license, for legal details.
 For online help and background, visit http://www.swi-prolog.org
 For built-in help, use ?- help(Topic). or ?- apropos(Word).
 ?- siblings (abdullah, aimen).
 ERROR: Syntax error: Operator expected
 ERROR: siblings
 ERROR: ** here **
 ERROR: (abdullah, aimen)
 ?- siblings(aimen, abdullah).
 true.
 ?- siblings(ali, sara).
 false.
 ?- married(ali,sara).
 true
```